Mr. Russell Alberson Fort Wayne Foundry Corp. - Pontiac Street Division 2509 East Pontiac Street Fort Wayne, IN 46803

Re: **003-14552** 

First Minor Permit Modification to Part 70 No.: T 003-6027-00070

Dear Mr. Alberson:

Fort Wayne Foundry Corp. - Pontiac Street Division was issued Part 70 operating permit T 003-6026-00070 on January 6, 2000 for secondary aluminum metal production source. A letter requesting changes to this permit was received on May 7, 2001. Pursuant to the provisions of 326 IAC 2-7-12 a Minor Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of one (1) cold box core machine to the existing source.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments CAO/MES

cc: File - Allen County U.S. EPA, Region V

Allen County Health Department

Air Compliance Section Inspector - Jennifer Dorn

Compliance Data Section - Karen Nowak

Administrative and Development - Janet Mobley Technical Support and Modeling - Michelle Boner

# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR QUALITY\*

### Fort Wayne Foundry Corp. - Pontiac Street Division 2509 East Pontiac Street Fort Wayne, Indiana 46803

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-6027-00070		
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: January 6, 2000 Expiration Date: January 6, 2005	

First Minor Source Modification 003-14364-00070

First Minor Permit Modification No.: 003-14552-00070	Pages affected: 5 and 8; 55a is added
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality*	Issuance Date: August 17, 2001

<sup>\*</sup>As of January 1, 2001, the name of the Office of Air Management (OAM) has been changed to the Office of Air Quality (OAQ). All references to Office of Air Management (OAM) should be read as Office of Air Quality (OAQ).

- D.6.6 Parametric MonitoringD.6.7 Baghouse Inspections
  - D.6.8 Broken Bag or Failed Bag Detection

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

#### D.7 FACILITY OPERATION CONDITIONS - Isocure Machines ISO-1 and ISO-2

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]
- D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

#### **Compliance Determination Requirements**

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.7.4 Record Keeping Requirements
- D.7.5 Reporting Requirements

#### D.8 FACILITY OPERATION CONDITIONS - Degreasing Operations

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.8.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.8.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]
- D.8.3 Hazardous Air Pollutants (HAPs)

#### D.9 FACILITY OPERATION CONDITIONS - Shotblasting, woodworking, finishing, etc.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter (PM) [326 IAC 6-3-2]

#### **Compliance Determination Requirements**

D.9.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.3 Particulate Matter (PM)

#### D.10 FACILITY OPERATION CONDITIONS - One (1) cold box core machine

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.10.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]
- D.10.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]
- D.10.4 Particulate Matter (PM and PM<sub>10</sub>) [326 IAC 2-2]

#### Certification

**Emergency/Deviation Occurrence Report** 

**Quarterly Report** 

**Quarterly Compliance Monitoring Report** 

Permit Reviewer: Nisha Sizemore Modified by: CAO/MES

- (5)the Disa pouring, cooling, and shakeout processes, consisting of the following:
  - (a) one (1) pouring system, identified as Disa #1, emission unit D-1, constructed in 1986, with a maximum capacity of 4.25 tons of melted aluminum per hour and a maximum capacity of 63.75 tons of sand per hour, with emissions uncontrolled, and exhausting to stack RV;
  - (b) one (1) cooling system, identified as Disa #1, emission unit D-1, constructed in 1986, with a maximum capacity of 4.25 tons of melted aluminum per hour and a maximum capacity of 63.75 tons of sand per hour, with emissions uncontrolled, and exhausting internally:
  - (c) one (1) castings shakeout knockout system, identified as Disa #1, emission unit D-1, constructed in 1986, with a maximum capacity of 4.25 tons of melted aluminum per hour and a maximum capacity of 63.75 tons of sand per hour, with emissions uncontrolled, and exhausting internally;
- (6)one (1) sand handling system, consisting of the following:
  - one sand muller, identified as SM-1, constructed in 1977, with a maximum capacity (a) of 90 tons of sand per hour, controlled by baghouse CD1, and exhausting through stack CD1:
  - (b) sand conveying and screening, identified as SS-1, constructed in 1977, with a maximum capacity of 90 tons of sand per hour, controlled by baghouse CD1, and exhausting through stack CD1;
- (7) the core making process, consisting of nine (9) core making machines, identified as CM-1 through CM-9, constructed in 1986, 1986, 1987, 1990, 1991, 1994, 1994, 1995, and 1998, respectively, each with a maximum capacity of 0.75 ton of sand per hour, all uncontrolled and exhausting through stacks C5 and C6.
- (8) One (1) cold box core machine, identified as CM-10, exhausting to stack C6, capacity: 0.75 tons of cores per hour.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6, including one (1) parts washer, constructed in 1991; [326 IAC 8-3-2][326 IAC 8-3-5]
- (2)Shotblasting operations including the following:
  - (a) one (1) Spinablast III shotblast machine, constructed in 1995, with a maximum capacity of 2 tons of aluminum castings per hour, controlled by a baghouse, designated as CD3; [326 IAC 6-3-2]
  - (b) one (1) Wheelabrator blast machine, constructed in 1987, with a maximum capacity of 1 ton of aluminum castings per hour, controlled by a baghouse, designated as CD4; [326 IAC 6-3-2] and

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#### **SECTION D.10**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]:

One (1) cold box core machine, identified as CM-10, exhausting to stack C6, capacity: 0.75 tons of cores per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.10.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the one (1) cold box core machine shall not exceed 3.38 pounds per hour when operating at a process weight rate of 0.75 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification to the one (1) cold box core machine that increases the potential to emit VOC to twenty-five (25) tons per year or more may make this modification subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and shall require prior IDEM, OAQ, approval.

#### D.10.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]

Any change or modification to the one (1) cold box core machine that increases the potential to emit each individual HAP to ten (10) tons per year or more or increases the potential to emit any combination of HAPs to twenty-five (25) tons per year or more may make this modification subject to the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) and shall require prior IDEM, OAQ, approval.

#### D.10.4 Particulate Matter (PM and PM<sub>10</sub>) [326 IAC 2-2]

Any change or modification to the one (1) cold box core machine that increases the potential to emit PM to twenty-five (25) tons per year or more or increases the potential to emit PM<sub>10</sub> to fifteen (15) tons per year or more may make the source subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and shall require prior IDEM, OAQ, approval.

#### **Compliance Determination Requirements**

There are no specific Compliance Determination Requirements applicable to this emission unit.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to this emission unit.

## Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a Part 70 Minor Permit Modification

#### **Source Background and Description**

Source Name: Fort Wayne Foundry Corp. - Pontiac Street Division 2509 East Pontiac Street, Fort Wayne, Indiana 46803

County: Allen SIC Code: 3365

Operation Permit No.: T 003-6027-00070
Operation Permit Issuance Date: January 6, 2000
Minor Permit Modification No.: 003-14552-00070

Permit Reviewer: CarrieAnn Ortolani/MES

The Office of Air Quality (OAQ) has reviewed a modification application from Fort Wayne Foundry Corp. - Pontiac Street Division relating to the construction of the following emission unit:

One (1) cold box core machine, identified as CM-10, exhausting to stack C6, capacity: 0.75 tons of cores per hour.

This modification will not increase the capacity, potential to emit or limited potential to emit of any of the other facilities at this source. A maximum of 0.75 tons of sand per hour will be allocated for this core machine. However, the total capacity, potential to emit and limited potential to emit of the sand handling will not increase as a result of this modification.

#### **History**

On May 7, 2001, Fort Wayne Foundry Corp. - Pontiac Street Division submitted an application to the OAQ requesting to add a cold box core machine to their existing plant. Minor Source Modification 003-14364-00070 will be issued to allow construction and operation of the modification. This Minor Permit Modification will incorporate operating conditions into the Part 70 operating permit, in accordance with 326 IAC 2-7-10.5(I)(2) and 326 IAC 2-7-12. Fort Wayne Foundry Corp. - Pontiac Street Division was issued a Part 70 permit on January 6, 2000. The Part 70 permit has been appealed and a resolution is pending.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

Fort Wayne Foundry Corp. - Pontiac Street Division Fort Wayne, Indiana

Permit Reviewer: CAO/MES

An application for the purposes of this review was received on May 7, 2001. Additional information was received by telephone on June 15 and June 25, 2001.

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Permit Modification: 003-14552-00070

#### **Proposed Changes**

The permit language is changed to read as follows (deleted language appears as strikeouts, new language appears in bold):

- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

  This stationary source consists of the following emission units and pollution control devices:
  - (1) the scrap and charge handling process, constructed in 1976, with a maximum charge rate of 9.75 tons of aluminum ingots and scrap per hour, with emissions uncontrolled;
  - (2) the aluminum melting process, consisting of the following:
    - (a) one (1) natural gas-fired reverberatory furnace system, identified as Disa #1/2, emission unit FD-1/2, constructed in 1986, with a maximum charge rate of 4.25 tons per hour of aluminum ingots and scrap, and with a maximum production rate of 4.25 tons of melted aluminum per hour, with emissions uncontrolled, and exhausting through stacks D2 and D10;
    - (b) one (1) natural gas-fired reverberatory furnace system, identified as Hunter #1, emission unit FH-1, constructed in 1990, with a maximum charge rate of 1.75 tons per hour of aluminum ingots and scrap, and with a maximum production rate of 1.75 tons of melted aluminum per hour, with emissions uncontrolled, and exhausting through stacks H8, H11, and H22;
    - (c) one (1) natural gas-fired reverberatory furnace system, identified Hunter #2, emission unit FH-2, constructed in 1992, with a maximum charge rate of 1.5 tons per hour of aluminum ingots and scrap, and with a maximum production rate of 1.5 tons of melted aluminum per hour, with emissions uncontrolled, and exhausting through stacks H8, H11, and H22;
    - (d) one (1) natural gas-fired reverberatory furnace system, identified Hunter #3, emission unit FH-3, constructed in 1995, with a maximum charge rate of 2.25 tons per hour of aluminum ingots and scrap, and with a maximum production rate of 2.25 tons of melted aluminum per hour, with emissions uncontrolled, and exhausting through stacks H8, H11, and H22.
  - (3) the Hunter #1 pouring, cooling, and shakeout processes, consisting of the following:
    - (a) one (1) pouring system, identified as Hunter #1, emission unit H-1, constructed in 1981, with a maximum capacity of 2.25 tons of melted aluminum per hour and a maximum capacity of 33.75 tons of sand per hour, with emissions uncontrolled, and exhausting to stack H30;
    - (b) one (1) cooling system, identified as Hunter #1, emission unit H-1, constructed in 1981, with a maximum capacity of 2.25 tons of melted aluminum per hour and a maximum capacity of 33.75 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting to stack CD-1;

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Permit Reviewer: CAO/MES

one (1) castings shakeout knockout system, identified as Hunter #1, emission unit (c) H-1, constructed in 1981, with a maximum capacity of 2.25 tons of melted aluminum per hour and a maximum capacity of 33.75 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting to stack CD-1;

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- (4) the Hunter #2 pouring, cooling, and shakeout processes, consisting of the following:
  - one (1) pouring system, identified as Hunter #2, emission unit H-2, constructed in (a) 1977, with a maximum capacity of 2.25 tons of melted aluminum per hour and a maximum capacity of 33.75 tons of sand per hour, with emissions uncontrolled, and exhausting to stack H30;
  - (b) one (1) cooling system, identified as Hunter #2, emission unit H-2, constructed in 1977, with a maximum capacity of 2.25 tons of melted aluminum per hour and a maximum capacity of 33.75 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting to stack CD-1;
  - (c) one (1) castings shakeout knockout system, identified as Hunter #2, emission unit H-2, constructed in 1977, with a maximum capacity of 2.25 tons of melted aluminum per hour and a maximum capacity of 33.75 tons of sand per hour, with emissions controlled by baghouse CD-1, and exhausting to stack CD-1;
- (5)the Disa pouring, cooling, and shakeout processes, consisting of the following:
  - (a) one (1) pouring system, identified as Disa #1, emission unit D-1, constructed in 1986, with a maximum capacity of 4.25 tons of melted aluminum per hour and a maximum capacity of 63.75 tons of sand per hour, with emissions uncontrolled, and exhausting to stack RV;
  - (b) one (1) cooling system, identified as Disa #1, emission unit D-1, constructed in 1986, with a maximum capacity of 4.25 tons of melted aluminum per hour and a maximum capacity of 63.75 tons of sand per hour, with emissions uncontrolled, and exhausting internally;
  - (c) one (1) castings shakeout knockout system, identified as Disa #1, emission unit D-1, constructed in 1986, with a maximum capacity of 4.25 tons of melted aluminum per hour and a maximum capacity of 63.75 tons of sand per hour, with emissions uncontrolled, and exhausting internally;
- (6)one (1) sand handling system, consisting of the following:
  - one sand muller, identified as SM-1, constructed in 1977, with a maximum capacity (a) of 90 tons of sand per hour, controlled by baghouse CD1, and exhausting through stack CD1;
  - (b) sand conveying and screening, identified as SS-1, constructed in 1977, with a maximum capacity of 90 tons of sand per hour, controlled by baghouse CD1, and exhausting through stack CD1;
- (7)the core making process, consisting of nine (9) core making machines, identified as CM-1 through CM-9, constructed in 1986, 1986, 1987, 1990, 1991, 1994, 1994, 1995, and 1998, respectively, each with a maximum capacity of 0.75 ton of sand per hour, all uncontrolled

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Permit Reviewer: CAO/MES

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and exhausting through stacks C5 and C6.

(8) One (1) cold box core machine, identified as CM-10, exhausting to stack C6, capacity: 0.75 tons of cores per hour.

#### **SECTION D.10**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]:

One (1) cold box core machine, identified as CM-10, exhausting to stack C6, capacity: 0.75 tons of cores per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.10.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the one (1) cold box core machine shall not exceed 3.38 pounds per hour when operating at a process weight rate of 0.75 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification to the one (1) cold box core machine that increases the potential to emit VOC to twenty-five (25) tons per year or more may make this modification subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and shall require prior IDEM, OAQ, approval.

#### D.10.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]

Any change or modification to the one (1) cold box core machine that increases the potential to emit each individual HAP to ten (10) tons per year or more or increases the potential to emit any combination of HAPs to twenty-five (25) tons per year or more may make this modification subject to the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) and shall require prior IDEM, OAQ, approval.

#### D.10.4 Particulate Matter (PM and PM<sub>10</sub>) [326 IAC 2-2]

Any change or modification to the one (1) cold box core machine that increases the potential to emit PM to twenty-five (25) tons per year or more or increases the potential to emit PM<sub>10</sub> to fifteen (15) tons per year or more may make the source subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and shall require prior IDEM, OAQ, approval.

**Compliance Determination Requirements** 

Fort Wayne Foundry Corp. - Pontiac Street Division Page 5 of 5
Fort Wayne, Indiana Permit Modification: 003-14552-00070

Permit Reviewer: CAO/MES

There are no specific Compliance Determination Requirements applicable to this emission unit.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to this emission unit.

#### Conclusion

The operation of this modification shall be subject to the conditions of the attached Part 70 Minor Permit Modification No. 003-14552-00070.